

Author Index

- Andrews, W. W., 231
- Bahado-Singh, R., 145
- Baley, J. E., 401
- Benacerraf, B. R., 124
- Bendel, C. M., 357
- Bendon, R. W., 217
- Benjamin, D. K., Jr., 375
- Bliss, J. M., 365
- Bromley, B., 124
- Burt, R. A., 495
- Carey, J. C., 212
- Carlo, W. A., 288
- Carter, B. S., 480
- Castro, M. A., 46
- Chapman, R. L., 352, 384
- Cheng, C.-C., 145
- Chervenak, F. A., 427
- Chisholm, C. A., 435
- Cleary-Goldman, J., 3
- Copper, R., 185
- Das, A. F., 185, 217
- DeVore, G. R., 160, 173
- Dusick, A. M., 302
- Ehrenkranz, R. A., 261, 264, 302, 311
- Ellis, J. J., 401
- Faix, R. G., 351, 352, 384
- Fanaroff, A. A., 281
- Finnerty, J. J., 435
- Frain, L., 471
- Garges, H., 375
- Gigliotti, F., 365
- Goldenberg, R. L., 185, 217, 231
- Gresens, W., 471
- Hack, M., 281
- Hall, J., 471
- Hannah, M. E., 34
- Hansen, N., 293
- Hauth, J., 239
- Hoey, S. D., 46
- Howe, E. G., 446
- Hussain, N., 458
- Iams, J. D., 185, 194, 204, 247
- Jobe, A. H., 343
- Johnson, F., 185
- Karlowicz, M. G., 393
- Kaufman, D., 414
- Klebanoff, M. A., 212
- Ladd, R. E., 488
- Lantos, J., 471
- Laptook, A., 320
- Lemons, J. A., 302
- Leuthner, S. R., 480
- McCullough, L. B., 427
- MacKenzie, I. Z., 20
- Mahoney, M. J., 145
- Malone, F. D., 86
- Matta, P., 145
- Meadow, W., 471
- Meis, P., 183, 185
- Mercer, B. M., 185, 217, 247
- Mercurio, M. R., 425, 488
- Miodovnik, M., 217
- Moawad, A., 185
- Morrison, J., 20
- Norwitz, E. R., 1, 73, 112
- Nyberg, D. A., 130
- O'Herlihy, C., 13
- O'Shea, M., 333
- Owen, J., 194
- Park, J. S., 112
- Plesha-Troyke, S., 471
- Pohlman, A., 471
- Poindexter, B. B., 302
- Rabello, Y. A., 217
- Ramsey, P. S., 54
- Ramsey, R. D., 217
- Rand, L., 73
- Ren, Y., 471
- Repke, J. T., 54
- Robinson, J. N., 1, 3, 112
- Rosenkrantz, T. S., 458
- Rosenwaks, Z., 427
- Rouse, D. J., 253
- Rowen, J. L., 406
- Shankaran, S., 320
- Shevell, T., 86
- Small, M., 145
- Socol, M. L., 105
- Sokol, G. M., 311
- Souter, V. L., 130
- Spong, C. Y., 183
- Steinbach, W. J., 375
- St. John, E. B., 288
- Stoll, B. J., 293
- Strand, M., 343
- Thom, E. A., 183, 253
- Thurnau, G. R., 217
- Towner, D., 46
- Tunde-Byass, M. O., 34
- Vintzileos, A. M., 121, 152
- Vohr, B. R., 333
- Walsh, M. C., 281
- Wellington, M., 365
- Wright, L. L., 261, 264, 333
- Yeo, L., 152

Subject Index

- Abruptio placentae
 antepartum hemorrhages and, 90-92
 as high risk for preeclampsia, 242
- Abscess, and neonatal candidal infection
 of lens, 403-404
 of skin, 411
- Academics, polled opinions of, on management of
 extremely low GA infants, 463
- Accuracy of genetic sonography for Down syndrome
 detection
 cost-effectiveness and, 175
 of second-trimester sonography, 153-154, 156-157
- Acid-base status of asphyxiated full-term infants, as
 factor in patient selection for
 neuroprotection, 322-323
- Acute intrapartum asphyxia in full-term infants, as
 factor in patient selection for
 neuroprotection, 324-325
- Adhesins, candidal, colonization and, 361
- Adhesion of epithelial cells, *see* Colonization,
 epithelial adhesion and, in pathology of
 neonatal candidiasis
- Adolescent mothers, decision making on care of
 critically ill newborn by, 492-494

- Adults
ethics of withdrawing nutrition and hydration from, 480-481
see also Health care providers; Neonatal intensive care unit, prediction of survival and mortality in MICU and; Parent(s)
- Age
gestational, *see* Gestation
maternal, *see* Maternal age
optimal, for high-risk infant follow-up, 334-335
- Aminoglycosides, 376
- Amniocentesis
cost-effectiveness of genetic sonography and, compared, 173-175, 178
see also Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling; Second-trimester genetic sonography in high-risk patients for Down syndrome, need for amniocentesis and
- Amnionitis, post-pPROM maternal and fetal, effects of antibiotics for, on neonatal outcome, 222-224
- Amoxicillin in PTB, 217, 219, 228
- Amphotericin B in neonatal candidiasis, 352-354, 365, 369, 420
candidemia, 370-372, 379
CNS candidiasis, 388, 389
lipid formulations of, 367-368
mucocutaneous infection, 407
ophthalmologic infection, 403
renal and urinary tract infection, 396-398
- Ampicillin, 217, 219-221, 298, 376
- Anal sphincter injury in vaginal delivery
anal sphincter function assessment and, 14
and importance of maintaining fecal continence, 13, 14
mechanism of, 13-14
risks of, *see* Risks of vaginal delivery, anal sphincter injury as
therapy of, *see* Therapy of anal sphincter injury unresolved issues concerning, 18-19
- Analgesia in vaginal breech delivery, 38
- Anesthesia
epidural, *see* Epidural anesthesia
intrapartum, in multifetal pregnancies, 57-58
- Aneuploidy, *see* Genetic sonography for Down syndrome detection
- Aneuploidy markers, Genetic Sonogram Scoring Index, 124-126
see also Risks for Down syndrome, genetic sonography adjustment of and *specific aneuploidy markers*
- Antenatal corticosteroids, NICHD RCT on, 296
- Antenatal prediction of neonatal morbidity and mortality in PTB, 247-252
- Antepartum hemorrhages, 87-94
due to placenta abruptio, 90-92
due to placenta previa/accreta, 87-90
due to uterine rupture, 93-94
due to vasa previa, 92-93
- Anterior episiotomy, 5
- Antibiotics
preventive, for candidemia, 376
as risk factor for candidiasis, 354, 357, 359-360, 394, 414-416
see also Antibiotics, effects of, on neonatal morbidity after pPROM; Antibiotics for PTB and *specific antibiotics*
- Antibiotics, effects of, on neonatal morbidity after pPROM, 217-230
effects of, on placental histology, 224-225
on maternal and fetal systemic inflammation and amnionitis, 222-224
on neonatal outcome and, *see* Neonatal outcome, effects of antibiotics on, in remote-from-term pPROM
ORACLE trial of, 228-229
- Antibiotics for PTB, 192, 212-216
in fetal fibronectin-positive women, 231-238
for genital and vaginal infections, 213-215, 250, 251, 254, 257
see also Antibiotics, effects of, on neonatal morbidity after pPROM and *specific antibiotics*
- Antifungal susceptibility testing in neonatal candidemia, 380
- Antifungal therapy of neonatal candidiasis
with amphotericin B, *see* Amphotericin B in neonatal candidiasis
with azoles, *see* Azoles in neonatal candidiasis empiric, 379
with flucytosine, 352-354, 368, 388, 389, 396
with oral nystatin, 407, 416-417
- Antimicrobial therapy, *see* Antibiotics
- Antiretroviral therapy, highly active, of human immunodeficiency-infected pregnant women refusal of, 436-437
- Apgar core of asphyxiated full-term infants, as factor in patient selection for neuroprotection, 322
- Arms, nuchal and extended, in vaginal breech delivery, CS delivery and, 39
- Arrested descent of fetal buttocks in vaginal breech delivery, CS delivery and, 39
- Arterial ligation, *see* Ligation, arterial, for obstetric hemorrhages
- Arterial oxygen tension changes when weaning infants from iNO, 315-316
- Artificial nutrition, *see* Withholding/withdrawing nutrition from newborns, ethics of
- ARTs (assisted reproductive technologies), *see* Newer reproductive technologies, ethical framework for
- Aspergillus* infection, 354, 371
- Asphyxia
acute intrapartum, in full-term infants, as factor in patient selection for neuroprotection, 324-325
fetal and/or neonatal, as risk of elective CS delivery, 26-27
see also Neuroprotection of asphyxiated term infants, NICHD RCT on
- Aspirin, *see* Low-dose aspirin for preeclampsia
- Assessment
of high-risk infants, 335-337
see also Assessment, pre-vaginal delivery

- Assessment, pre-vaginal breech delivery
 fetal, 37-38
 maternal pelvis, 37
- Assessment, pre-vaginal delivery
 anal sphincter function, 14
 gestational age, accuracy of, 270
 see also Assessment, pre-vaginal breech delivery
- Assisted reproductive technologies, see Newer reproductive technologies, ethical framework for
- Assisted vaginal delivery, see Forceps delivery
- Atony, uterine, PPH due to, 94-95
- Autonomy principle
 and decision making on care of critically ill newborns, 490
 defined, 427
 and newer reproductive technologies, 429-430, 432,
 and patient refusal of treatment, 436-438, 440-444
- Azoles
 for neonatal candidiasis, 368, 369, 371
 see also Clotrimazole; Fluconazole in neonatal candidiasis; Itraconazole; Ketoconazole; Metronidazole; Miconazole; Voriconazole
- Bacterial vaginosis (BV), as risk factor for PTB, 186-188, 212-215
- Bed-days, prediction of mortality and survival in NICU and MICU as function of, 476-477
- Beneficence principle
 defined, 427
 and newer reproductive technologies, 428-429, 432
 and patient refusal of treatment, 436, 437, 440, 442, 444
 see also Nonmaleficence principle
- Benefits and risks
 of CS delivery, 26-27
 of fetal surgery, 448-451
- Best interest standard
 in decision making on care of critically ill newborns, 489-491
 in fetal surgery, 448-451
- Biochemical predictors of PTB, 189-190
 see also Fetal fibronectin, PTB and
- Biological basis for intervention, incorrect, multiple negative RCTs and, 344-345
- Birth weight, effects of antibiotics on, in remote-from-term pPROM, 227
- Blood component transfusions, obstetric hemorrhage management with, 100-101
- Blood loss
 in mediolateral and/or midline episiotomy, 6
 see also Antepartum hemorrhages; Postpartum hemorrhages; Therapy of obstetric hemorrhages
- Blood sampling, fetal, during labor in vaginal breech delivery, 38
- Bloodstream *Candida* infection, see Candidemia, neonatal
- B-Lynch suture for obstetric hemorrhages, 97
- Bonding, parent-infant, effects of elective CS delivery on, 28
- Bowel, see Hyperechoic bowel, as Down syndrome marker
- BPD/CLD (bronchopulmonary dysplasia/chronic lung dysplasia), NICHD RCT on, 272-274
- Brain injury in VLBW and ELBW infants
 neurophysiological signs of, and patient selection for neuroprotection, 323-324
 reduction of, 275-276
- Breech presentation, see Vaginal breech delivery
- Bronchopulmonary dysplasia/chronic lung dysplasia (BPD/CLD), NICHD RCT on, 272-274
- Buttocks, arrested descent of fetal, in vaginal breech delivery, 39
- BV (bacterial vaginosis), as risk factor for PTB, 186-188, 212-215
- C. albicans* infection, see *Candida albicans* infection
- C. dubliniensis* (*Candida dubliniensis*) infection, 353, 358
- C. glabrata* infection, see *Candida glabrata* infection
- C. guilliermondii* (*Candida guilliermondii*) infection, 353, 415
- C. krusei* (*Candida krusei*) infection, 353, 360, 366, 369, 371, 388
- C. lusitanae* (*Candida lusitanae*) infection, 353, 366, 369, 388, 415
- C. parapsilosis*, see *Candida parapsilosis* infection
- C. trachomatis* (*Chlamydia trachomatis*) infection, PTB and, 213
- C. tropicalis*, see *Candida tropicalis* infection
- Candida albicans* (*C. albicans*) infection, 353, 366, 415
 in candidemia, 376, 377
 in CNS candidiasis, 386
 colonization by, 358-362
 in endophthalmitis, 402
 in mucocutaneous candidiasis, 410
 treatment of, 366, 369, 371, 417, 418, 420
- Candida dubliniensis* (*C. dubliniensis*) infection, 353, 358
- Candida glabrata* (*C. glabrata*) infection, 353, 415
 CNS infection, 388
 colonization in, 358-361
 ophthalmologic, 402
 treatment of, 365, 366, 369, 371, 374
- Candida guilliermondii* (*C. guilliermondii*) infection, 353, 415
- Candida krusei* (*C. krusei*) infection, 353, 360, 366, 369, 371, 388
- Candida lusitanae* (*C. lusitanae*) infection, 353, 366, 369, 388, 415
- Candida parapsilosis* (*C. parapsilosis*) infection, 353, 415
 candidemia, 376-378
 CNS infection, 386
 colonization by, 358, 362
 treatment of, 366, 369, 371, 372, 417, 420
- Candida tropicalis* (*C. tropicalis*) infection, 353
 in candidemia, 377, 378
 in CNS candidiasis, 386
 colonization by, 358-361

- in endophthalmitis, 402
- treatment of, 366, 369, 371, 417
- Candidates to fluconazole therapy of neonatal candidiasis, 421-422
- Candidemia, neonatal, 375-383
 - antifungal susceptibility testing in, 380
 - diagnosis of, 376-379
 - empiric therapy of, 379
 - end organ damage due to, 380
 - epidemiology of, risk factors for, and prevention of, 376
 - molecular tests of, 377-378
 - pathophysiology of, 375-376
- Candidiasis, *see* Invasive neonatal candidiasis
- Cardiovascular markers, echocardiographic, of Down syndrome, 167-168
- Caspofungin (MK 0991), 368, 371-372
- Casuistry, defined, 444
- Cataract due to neonatal candidiasis, 403-404
- CDH (congenital diaphragmatic hernia) with hypoxic respiratory failure, NICHD RCT on iNO for, 315
- Cefotaxime, 376
- Central nervous system (CNS) candidiasis, neonatal, 384-392
 - caveats on, 384-385
 - clinical signs of, 386
 - diagnosis of, 386-388
 - follow-up and outcome of, 390
 - pathology and pathogenesis of, 385-386
 - therapy of, 388-389
- Cephalic version, external, breech presentation with, 35-36
- Cephalosporins, 414
- Cerclage, *see* Cervical cerclage
- Certification of sonographers performing cervical ultrasound, 197-198
- Cervical cerclage, 73-85
 - complications of, 76, 77
 - contraindications to, 74-75
 - emergent, 80-82
 - for incompetent cervix, 201
 - indications for, 73-74
 - post-PROM, 78-80
 - repeat, 82
 - for short cervix, 78, 191, 192
 - technical considerations on, 75-76
 - transabdominal cervicoisthmic, 76-78
- Cervical ultrasound evaluation for PTB, 194-203
 - certification and proficiency of sonographers performing, 197-198
 - of incompetent cervix, 200-202
 - the procedure, 195-197
 - PTB prediction with, 198-200
- Cervicoisthmic cerclage, transabdominal, 76-78
- Cesarean hysterectomy for obstetric hemorrhages, 99
- Cesarean section (CS) delivery(ies)
 - placenta previa/accreta and number of previous, 88
 - role, in breech presentation, 34-35, 39
 - of triplet pregnancy, 69
 - see also* Elective cesarean section delivery; Vaginal birth after cesarean section delivery
- Chlamydia trachomatis* (*C trachomatis*) infection, PTB and, 213
- Chorioretinitis (lens abscess), neonatal candidal, 403-404
- Choroid plexus cysts, as Down syndrome markers, 140, 146, 154, 162, 166
- Chronic hypertension
 - and high risk for preeclampsia, 241-242
 - PTB and history of, 190
- Chronic lung dysplasia/bronchopulmonary dysplasia, NICHD RCT on, 272-273
- Classical forceps, described, 113
- Classical technique of rotational forceps use, described, 116-117
- Classification of forceps, 113, 114
- Clavulanic acid, 228
- Clindamycin, 213, 215
- Clinical applications of Genetic Sonogram Index, 128
- Clinical decision making, *see* Decision making on care of critically ill newborns, ethics of
- Clinical markers of asphyxia in full-term infants, patient selection for neuroprotection and, 323-325
- Clinical practice, ethical framework for, 428
- Clinical signs of neonatal candidiasis
 - of CNS candidiasis, 386
 - of oropharyngeal candidiasis, 407
 - of renal and urinary tract candidiasis, 393-394
- Clinical trials, *see* entries beginning with terms:
 - Randomized clinical trials
- Clinicians, *see* Health care providers
- Clotrimazole, 408
- CNS, *see* Central nervous system candidiasis, neonatal
- Coagulation, intravascular disseminated, and obstetric hemorrhages, management of, 101
- Colonization, epithelial adhesion and, in pathology of neonatal candidiasis, 353, 357-364
 - antimicrobial therapy and, 359-360, 415-416
 - Candida* morphology and, 361-362
 - Candida* species in, *see* Species, *Candida*
 - candidal adhesins and, 361-362
 - gastrointestinal and skin, 358
 - mucosal adhesion by *Candida*, 360
 - risk factors for, 359-360, 415-416
 - vaginal, 358-359
- Colony-stimulating factor, intravenous granulocyte-macrophage, in *Candida* infection prevention, 416
- Color Doppler ultrasound, grayscale and, of fetal heart defects, 167-168
- Combined antifungal therapy, 372
- Combined serum and ultrasound screening for Down syndrome detection, 145-151
 - cost-effectiveness of, 149-150
 - and other aneuploidies, 150
 - patient-specific Down syndrome risk estimation with, 147-149
 - population studies on, 149
 - value of, 146-147

- Complications
 of cervical cerclage, 76, 77
 postoperative, of obstetric hemorrhage management, 101
 see also specific conditions
- Confounded primary outcome, negative RCTs and, 346-347
- Congenital candidiasis, 408-409
- Congenital diaphragmatic hernia (CDH) with hypoxic respiratory failure, NICHD RCT on iNO for, 315
- Congenital heart defects, *see* Fetal echocardiography, genetic sonography and, in Down syndrome detection
- Conjoined twins, delivery of, 67
- Consent, *see* Informed consent
- Consequentialism (utilitarianism)
 defined, 435
 and patient refusal of treatment, 437, 438, 440, 443, 444
- Continence, *see* Fecal continence
- Contractions, *see* Uterine contractions, role of, in PTB
- Contraindications
 to cervical cerclage, 74-75
 to forceps delivery, 115
- Controlled trials, *see entries beginning with terms:*
 Randomized controlled trials
- Corticosteroids
 for extremely low GA infants, 458, 463
 in PTB, 218, 219, 222, 254, 256-259
 as risk factor for candidiasis, 357, 414-416, 421, 422
 in VLBW and ELBW infants, 281, 283-285, 288, 290, 291, 293-297, 339
- Cost and cost-effectiveness
 of combined serum and ultrasound screening for Down syndrome, 149-150
 of elective CS delivery, 28-29
 of VBAC, 108-109
 see also Cost-effectiveness of genetic sonography for Down syndrome detection
- Cost-effectiveness of genetic sonography for Down syndrome detection, 173-182
 and of amniocentesis, compared 173-175, 178
 maternal age and, *see* Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling
- Counseling
 on anal sphincter injury in subsequent deliveries, 18
 genetic, *see* Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling
- Critically ill newborns, *see* Ethics in perinatology
 specific conditions and interventions
- CS, *see* Cesarean section delivery(ies)
- Cysts, choroid plexus, as Down syndrome markers, 140, 146, 154, 162, 166
- Decision makers
 considerations of, on WH/WD of nutrition from newborns, 482
 see also Decision making on care of critically ill newborns, ethics of
- Decision making on care of critically ill newborns, ethics of, 428, 488-494
 on fetal surgery, 446-447, 451-455
 on resuscitation of extremely low GA infants, 466-467
 shared, 489-491
 on WH/WD of nutrition, 482-484
 by young adolescent mothers, 491-494
- Delayed fetal and neonatal consequences of elective CS delivery, 28
- Delayed postpartum hemorrhages (PPH), 96
- Delivery mode, *see* Anal sphincter injury in vaginal delivery; Cesarean section delivery(ies); Delivery mode in multifetal pregnancies; Forceps delivery; Multifetal pregnancy, vaginal delivery of; Vacuum extractor; Vaginal birth after cesarean section delivery; Vaginal breech delivery
- Delivery mode in multifetal pregnancies
 delivery planning and, 58-59
 in higher-order (other than twin or triplet) multiple pregnancies, 70
 in triplet pregnancies, 68-69
 in twin pregnancies, *see* Delivery mode in twin pregnancies, fetal presentation and
 see also Intrapartum management of multifetal pregnancies
- Delivery mode in twin pregnancies, fetal presentation and, 61-67
 of conjoined twins, 67
 of monoamniotic twins, 66-67
 nonvertex first twin presentation, 65-66
 vertex/nonvertex presentation and, 62-65
 vertex/vertex presentation and, 61-62
 see also Twin pregnancies, intrapartum management of
- Deontology, defined, 444
- Dermatitis, 408-410
 diaper, 408
 neonatal invasive fungal, 409-410
- Descent of fetal buttocks, arrested, in vaginal breech delivery, CS delivery for, 39
- Design
 of forceps, 113
 of RCTs, and negative RCTs and, 344
- Development, *see* Growth and development
- Dexamethasone, 273, 291, 293, 295, 339, 415
- Diabetes mellitus, preeclampsia and pregestational, 243-244
- Diagnosis
 of preeclampsia in nulliparous women, 240-241
 see also Assessment *specific conditions and diagnostic techniques*
- Diagnosis of invasive neonatal candidiasis, 354
 candidemia, 376-379
 CNS candidiasis, 386-388
 renal and urinary tract candidiasis, 394-396

- Diaper dermatitis, 408
- Diaphragmatic hernia, congenital, with hypoxic respiratory failure in VLBW and ELBW infants, iNO for, 272-274
- DIC (disseminated intravascular coagulation) in obstetric hemorrhages, management of, 101
- Digital examination, impact of post-PPROM, on neonatal outcome, 227
- Direct technique of rotational forceps use, described, 116
- Disability, *see* Handicaps
- Disputes, *see* Parent(s), disputes between health care providers and
- Disruption, anal sphincter, *see* Anal sphincter injury in vaginal delivery
- Disseminated intravascular coagulation (DIC) in obstetric hemorrhages, management of, 101
- Distress, fetal, ethics of maternal refusal of surgery for, 437-439
- Distributive justice
defined, 436
and patient refusal of treatment, 437
- Doppler ultrasound, grayscale and color, of fetal heart defects, 167-168
- Down syndrome, *see* Genetic sonography for Down syndrome detection
- Duration
of follow-up of asphyxiated full-term infants, 329
of labor in vaginal breech delivery, 38
- Early erythropoietin therapy, effects of, on transfusion requirements in VLBW and ELBW infants, 271-272
- Early inhaled nitric oxide (iNO), late versus, in full-term or near-term infants with hypoxic respiratory failure, NICHD RCT on, 316-317
- Early neurodevelopmental outcome of extremely low GA infants, 464
- Early-onset infections in VLBW and ELBW infants, NICHD RCT on interventions to prevent, 271, 293-301
antenatal corticosteroids for, 296
observational studies on, 295-296
- Echinocandins, 371
- Echocardiography, *see* Fetal echocardiography, genetic sonography and, in Down syndrome detection
- Echogenic intracardiac focus (EIF), as Down syndrome marker, 125-126
risk adjustment with, 131, 133-135, 139-140
in second-trimester sonography, 154
- Echography, *see* Cervical ultrasound evaluation for PTB; Fetal ultrasound
- Economics, *see* entries beginning with term: Cost
- ECV (external cephalic version) in vaginal breech delivery, 35-36
- Effective therapy for asphyxiated term infants, characteristics of, 325-329
- Efficacy of VBAC, 105-106
- EIF, *see* Echogenic intracardiac focus, as Down syndrome marker
- ELBW infants, *see* Extremely low birth weight infants
- Elective cesarean section (CS) delivery, 20-33
economics of, 28-29
modern dilemma of, 21
rate of, 21-22
risks of, *see* Fetal and neonatal risks of elective CS delivery; Maternal risks of elective CS delivery
- Embolization, pelvic vessel, for obstetric hemorrhages, 97-99
- Embryos, number of, to be transferred during in vitro fertilization, ethical issues in, 429-431
- Emergent (rescue or salvage) cervical cerclage, 80-82
- Emotional considerations on WH/WD of nutrition from newborns, 484-486
- Empiric therapy of neonatal candidemia, 379
- End organ damage due to neonatal candidemia, 380
- Endophthalmitis (ophthalmologic candidal infection), neonatal, 401-405
- Enterocolitis, necrotizing, NICHD RCT on, 271
- Entrapped head, vaginal breech delivery for, 39-40
- Epidemiology of neonatal candidiasis, 393
candidemia, 376
renal and urinary tract candidiasis, 393
- Epidural anesthesia
as risk factor for anal sphincter injury, 15
safety of labor, in preeclampsia treated with low-dose aspirin, 244-245
- Episiotomy, 3-12
history of, 3-5
method of, 5-6
as risk factor for anal sphincter injury, 15-16
role of, in current practice, 7-10
- Epithelial adhesion, *see* Colonization, epithelial adhesion and, in pathology of neonatal candidiasis
- Erythromycin
for infections in VLBW and ELBW infants, 297
in PTB, 213, 217, 218, 228, 231, 235
- Erythropoietin therapy, effects of early, on transfusion requirements in VLBW and ELBW infants, 271-272
- Ethical principles, defined, 427
- Ethics of caring, defined, 444-445
- Ethics in perinatology
introduction to, 425-426
see also Decision making on care of critically ill newborns, ethics of; Extremely low gestational age infants, ethical issues and survival of; Fetal surgery, ethical issue(s) in; Life support withdrawal from critical neonates; Maternal refusal of treatment in obstetrics; Neonatal intensive care unit, prediction of survival and mortality in MICU and; Newer reproductive technologies, ethical framework for; Withholding/withdrawing of nutrition from newborns, ethics of
- Evaluation, *see* Assessment; Diagnosis and specific conditions
- Evidence-based ethics of extremely low GA infant resuscitation, 465-467

- Examination, digital, impact of post-pPROM, on neonatal outcome, 227
- Experienced practitioners for vaginal breech delivery, 38-39
- Extended and nuchal arms in vaginal breech delivery, 39
- External cephalic version (ECV) in vaginal breech delivery, 35-36
- Extremely low birth weight (ELBW) infants
prevention of candidiasis in, with fluconazole, 418-420; *see also* Neonatal candidiasis
see also Neonatal Institute of Child Health and Development research; Preterm birth and specific conditions
- Extremely low gestational age (GA) infants, ethical issues and survival of, 458-470
data on, 459-462
development and, 459
future of, 467-467
influence of site of care on survival, 463
neurodevelopmental outcomes and, 464-465
polled opinions of health care providers and academics on, 463
resuscitation of, evidence-based ethics of, 465-467
temporal trends in, 462-463
- Factual considerations on WH/WD of nutrition from newborns, 482-483
- Family
best interest of, in decision making on care of critically ill infants, 489-491
see also Parent(s)
- Fathers
role of, in decision making on fetal surgery, 453-455
see also Parent(s)
- 5-FC (flucytosine), 352-354, 368, 388, 389, 396
- Fecal continence
importance of maintaining, in vaginal delivery, 13, 14
see also Anal sphincter injury in vaginal delivery
- Femur, shortened, *see* Shortened femur and/or humerus, as Down syndrome marker
- Fertilization, in vitro, number of embryos to be transferred during, ethical issues in, 429-431
- Fetal assessment for vaginal breech delivery, 37-38
- Fetal blood sampling during labor in vaginal breech delivery, 38
- Fetal buttocks, arrested descent of, in vaginal breech delivery, rescue CS delivery and, 39
- Fetal development extremely low GA infants, survival and, 459
- Fetal distress, ethics of maternal refusal of surgery for, 437-439
- Fetal echocardiography, genetic sonography and, in Down syndrome detection, 160-172
with grayscale and color Doppler ultrasound, 167-168
with grayscale four-chamber real-time ultrasound, 167
incidence and type of congenital heart defects detected with, 163-165
noncardiovascular markers in, 166-168
normal, risk of Down syndrome after, 168-170
in second-trimester Down syndrome fetuses, *see* Second-trimester Down syndrome fetuses, echocardiography and genetic sonography of
- Fetal fibronectin (FFN), PTB and, 187-190, 192, 214
antibiotics for FFN-positive women, 231-238
- Fetal head, hyperextension of, and vaginal breech delivery, 37
- Fetal heart defects, *see* Fetal echocardiography, genetic sonography and, in Down syndrome detection
- Fetal heart rate
as factor selection of asphyxiated full-term patient neuroprotection, 322
monitoring of, during labor in vaginal breech delivery, 38
- Fetal inflammation, post-pPROM systemic, effects of antibiotics for amnionitis and, on neonatal outcome, 222-224
- Fetal and neonatal risks of elective CS delivery, 26-28
asphyxia, 26-27
delayed, 28
to parent-infant bonding, 28
physical trauma, 26
to respiratory function, 27-28
- Fetal presentation
in triplet pregnancies, 68
see also Delivery mode in twin pregnancies, fetal presentation and; Vaginal breech delivery
- Fetal risks
and benefits of fetal surgery, 448-451
of rotational forceps-assisted delivery, 117-118
see also Fetal and neonatal risk(s) of elective CS delivery
- Fetal surgery, ethical issue(s) in, 446-457
decision making and, 446-447, 451-455
fetal risk/benefit ratio and, 448-451
maternal risks and, 451-453
- Fetal ultrasound
during vaginal breech delivery, 37-38
see also Genetic sonography for Down syndrome detection
- Fetal weight, and vaginal breech delivery, 37
- Fetus-as-patient concept, 428-429
- Fibronectin, fetal, *see* Fetal fibronectin, PTB and Fluconazole in neonatal candidiasis, 360, 368-371, 417
candidemia, 379
CNS candidiasis, 388, 389
mucocutaneous infection, 408
prevention of candidiasis with, 418-420
in renal and urinary tract infection, 396-398
resistance to, 388, 420-421
- Flucytosine (5-FC), 352-354, 368, 388, 389, 396
- Fluid volume restoration in obstetric hemorrhage management, 100
- Follow-up
of neonatal CNS candidiasis, 390
see also Follow-up, NICHD RCT on

- Follow-up, longitudinal, of high-risk infants, NICHD RCT on, 267-268, 333-342
 assessment with, 335-337
 need for, 333-334
 optimal age for, 334-335
 value of, 337-340
 who should be followed, 334
- Follow-up, NICHD RCT on
 of treated asphyxiated term infants, 329
see also Follow-up, longitudinal, of high-risk infants, NICHD RCT on
- Forceps
 classification of, 113, 114
see also Forceps delivery
- Forceps delivery
 indications for, 113-114
 rotational, *see* Rotational forceps delivery
 vaginal delivery with, 113
 VE and, *see* Forceps delivery, VE and
- Forceps delivery, VE and
 forceps versus, 46-50
 sequential, 50-51
 $\geq 45^\circ$ rotation, abandoning rotational delivery requiring more than or equal to, 119
- Four-chamber real-time ultrasound, grayscale, of fetal heart defects, 167
- Frequency
 of invasive neonatal candidiasis, 353
 of uterine contractions, and PTB, 208-210
- Full-term infants, *see* Inhaled nitric oxide for hypoxic respiratory failure in full-term or near full-term infants, NICHD RCT on; Neuroprotection of asphyxiated term infants, NICHD RCT on *and specific conditions*
- Fungal dermatitis, neonatal invasive, 409-410
- GA, *see* Gestational age
- Gastrointestinal colonization, *Candida*, 358
- GBS (group B streptococcus) infections, vaginal, antibiotics for, 219-224
- Gene transfer technology, ethics of, 431-433
- Genetic counseling, *see* Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling
- Genetic Sonogram Scoring Index in Down syndrome detection, 124-129
 clinical applications of, 128
 markers in, *see* Aneuploidy markers, Genetic Sonogram Scoring Index
 results obtained with, 126-128
- Genetic sonography for Down syndrome detection
 introduction to, 121-123
see also Combined serum and ultrasound screening for Down syndrome detection; Cost-effectiveness of genetic sonography for Down syndrome detection; Fetal echocardiography, genetic sonography and, in Down syndrome detection; Genetic Sonogram Scoring Index in Down syndrome detection; Risks for Down syndrome, genetic sonography adjustment of; Second-trimester genetic sonography in high-risk patients for Down syndrome, need for amniocentesis and
- Genital tract hematomas, PPH due to, 95-96
- Genital tract infections, *see* Vaginal and genital tract infections, PTB and
- Gentian violet, 407
- Germ-line risks of gene transfer technology, 433
- Gestation
 ethics of treatment refusal at 8 weeks of, by 30-year-old G 3 P 2 Rh negative Jehovah's Witness with hydrops fetalis and severe Rh sensitization, 442-443
 ethics of treatment refusal by terminally ill pregnant patient at 25 weeks of, 439-441
see also Gestational age
- Gestational age (GA)
 accuracy in assessment of, 270
see also Extremely low gestational age infants, ethical issues and survival of
- Granulocyte-macrophage colony-stimulating factor, intravenous, in *Candida* infection prevention, 416
- Grayscale and color Doppler ultrasound of fetal heart defects, 167-168
- Grayscale four-chamber real-time ultrasound of fetal heart defects, 167
- Group B streptococcus (GBS) infections, vaginal, antibiotics for, 219-224
- Growth and development
 fetal, of extremely low GA infants, survival and, 459
 iNO effects on neurodevelopment of near-term or full-term infants with hypoxic respiratory failure, 315
see also Growth and development of extremely low GA infants; Growth and development of VLBW and ELBW infants, NICHD study on; Neurodevelopment
- Growth and development of extremely low GA infants
 fetal development and survival of low GA infants, 459
 neurodevelopmental, 464-465
- Growth and development of VLBW and ELBW infants, NICHD study on, 302-310
 on neurodevelopment, 275-276
 on nutrition requirements for, 306-308
 observational study on, 268-270
- G 3 P 2 Rh negative Jehovah's Witness, 30-year old, with severe Rh sensitization and hydrops fetalis at 28 weeks of gestation, ethics of treatment refusal by, 442-443
- Guidelines, physicians'
 for decision making on care of critically ill newborn of young adolescent mother, 493-494
 for WH/WD of nutrition from newborns, 486-487
- H2 blockers, 295, 394, 414, 421, 422
- Handicaps
 of asphyxiated full-term infants, 328
 in multifetal pregnancies, 55

- Head, fetal, and vaginal breech delivery
 entrapped head, 39-40
 hyperextended head, 37
- Health care providers
 polled opinions of, on management of extremely
 low GA infants, 463
 role of, in decision making on fetal surgery, 453-
 455
see also Parent(s); Physicians
- Heart defects, *see* Fetal echocardiography, genetic
 sonography and, in Down syndrome
 detection
- Heart rate, *see* Fetal heart rate
- Hematomas, genital tract, PPH due to, 95-96
- Hemorrhages, *see* Blood loss
- High-risk population for preeclampsia, 241-244
 abruptio placentae and, 242
 chronic hypertension and, 241-242
 multifetal gestation, previous preeclampsia and,
 242-243
 neonatal outcome on, 242
 pregestational diabetes mellitus and, 243-244
- Highly active antiretroviral therapy, human
 immunodeficiency virus-infected pregnant
 women refusal of, 436-437
- Histology, placental, effects of antibiotics on, in
 pPROM, 224-225
- History of episiotomy, 3-5
- Human immunodeficiency virus (HIV)-infected
 pregnant women refusal of highly active
 antiretroviral therapy, ethics of, 436-437
- Human milk in *Candida* infection prevention, 416
- Humerus, shortened, *see* Shortened femur and/or
 humerus, as Down syndrome marker
- Hydrocortisone, 394
- Hydronephrosis, *see* Renal pyelectasis, as Down
 syndrome marker
- Hydrops fetalis and severe Rh sensitization, ethics of
 treatment refusal by 30-year-old G 3 P 2 Rh
 negative Jehovah's Witness with, at 28 weeks
 of gestation, 442-443
- Hyperchoic bowel, as Down syndrome marker, 125,
 162, 166-168
 in combined serum and ultrasound detection, 146
 risk adjustment for Down syndrome with, 131,
 133-135, 137-138
- Hyperextension of fetal head, and vaginal breech
 delivery, 37
- Hypertension
 chronic, and high risk for preeclampsia, 241-242
 persistent pulmonary newborn, in VLBW and
 ELBW infants, iNO for, 270-271, 311-312
 and PTB, 190
- Hypogastric artery ligation for obstetric
 hemorrhages, 97
- Hypovolemia in obstetric hemorrhages,
 management of, 99-100
- Hypoxic respiratory failure with CDH, NICHD RCT
 on iNO for, 315
- Hysterectomy, cesarean, for obstetric hemorrhages,
 99
- ICU, *see* Neonatal intensive care unit, prediction of
 survival and mortality in MICU and
- Imipenem, 376
- Immunoglobulin, intravenous, polyclonal, in
Candida infection prevention, 416
- Incidence
 of breech presentation, 34
 of congenital heart defects, 163-165
see also Incidence of neonatal candidiasis and
specific conditions
- Incidence of neonatal candidiasis, 353
 of neonatal CNS candidiasis, 385
- Incompetent cervix
 cervical ultrasound evaluation of, 200-202
see also Short cervix, and PTB
- Incontinence, fecal, *see* Fecal continence
- Incorrect preliminary date, negative RCTs and, 345-
 346
- Indication(s)
 for cervical cerclage, 73-74
 for forceps delivery, 113-114
- Indication-specific accuracy of genetic sonography
 for Down syndrome detection, 156
- Individual patients, mortality and survival in NICU
 and MICU as function of, 475-476
- Indomethacin, 275
- Induction of labor in vaginal breech delivery with
 oxytocics, 38
- Infant, *see* Invasive neonatal candidiasis and entries
beginning with term: Neonatal
- Infections, *see* Early-onset infections in VLBW and
 ELBW infants, NICHD RCT on interventions
 to prevent; Vaginal and genital tract
 infections, PTB and *and specific infections*
- Inflammation, post-pPROM maternal and fetal,
 effects of antibiotics for, on neonatal
 outcome, 222-224
- Informed consent
 for gene transfer therapy, 431-432
 for newer reproductive technologies, 430
- Inhaled nitric oxide (iNO) for hypoxic respiratory
 failure, NICHD RCT on, 274-275, 311-319
 on arterial oxygen tension changes when weaning
 off, 315-316
 in full-term and nearly full-term infants, *see*
 Inhaled nitric oxide for hypoxic respiratory
 failure in full-term or near full-term infants,
 NICHD RCT on
 on nitrogen dioxide formation during, 312-313
 for PPHN, 270-271, 311-312
 in preterm infants with severe hypoxic respiratory
 failure, 274-275, 317
- Inhaled nitric oxide (iNO) for hypoxic respiratory
 failure in full-term or near full-term infants,
 NICHD RCT on, 313-317
 on early versus late, 316-317
 on neurodevelopment, 315
- Initiation of neuroprotection of asphyxiated full-
 term infants, 328-329
- Injury, *see* Anal sphincter injury in vaginal delivery;
 Brain injury in VLBW and ELBW infants;
 Physical trauma

- Instrumental delivery
 as risk factor for anal sphincter injury, 15
 see also Forceps delivery; Vacuum extractor
- Integrity principle
 applied to newer reproductive technologies, 430-431
 defined, 428
- Intensive care unit, *see* Neonatal intensive care unit, prediction of survival and mortality in MICU and
- Interventions, NICHD RCTs on
 for asphyxiated term infants, 325-329
 for BPD/CLD, 272-274
 incorrect basis for, and negative RCTs, 344-345
 to reduce brain injury, provide neuroprotection, or improve neonatal development, 275-276
 see also Early-onset infections in VLBW and ELBW infants, NICHD RCT on interventions to prevent *specific interventions*
- Intestinal perforation, spontaneous, neonatal candidiasis and, 410-411
- Intracardiac focus, *see* Echogenic intracardiac focus, as Down syndrome marker
- Intrapartum asphyxia, full-term infants with acute, as factor in patient selection for neuroprotection, 324-325
- Intrapartum management of multifetal pregnancies, 54-72
 anesthesia in, 57-58
 delivery planning and, 58-59
 in general, 56-57
 intrapartum monitoring in, 57
 of quadruplet, quintuplet, sextuplet, and septuplet pregnancies, 69-70
 and timing of delivery, 57
 of triplet pregnancies, 55, 67-69
 of twin pregnancies, *see* Twin pregnancies, intrapartum management of
 of vaginal delivery in, *see* Multifetal pregnancy, vaginal delivery of
- Intrapartum mechanical factors, as risk for anal sphincter injury, 15
- Intrauterine infections, *see* Vaginal and genital tract infections, PTB and
- Intravascular coagulation, disseminated, in obstetric hemorrhages, management of, 101
- Intravenous polyclonal immunoglobulin (IVIG) in *Candida* infection prevention, 416
- Invasive fungal dermatitis, neonatal, 409-410
- Invasive neonatal candidiasis
 historical perspective on, 352
 incidence of, *see* Incidence of neonatal candidiasis
 introduction to, 351
 ophthalmologic, 401-405
 species in, *see* Species, *Candida*
 see also Antifungal therapy of neonatal candidiasis; Candidemia, neonatal; Central nervous system candidiasis, neonatal; Colonization, epithelial adhesion and, in pathology of neonatal candidiasis; Mucocutaneous candidiasis, neonatal; Pathogenesis of invasive neonatal candidiasis; Prevention of invasive neonatal candidiasis; Renal and urinary tract infection, neonatal candidal
- Inversion, uterine, PPH due to, 96
- In vitro fertilization (IVF), number of embryos to be transferred during, ethics of, 429-431
- Itraconazole, 389
- IVF (in vitro fertilization), number of embryos to be transferred during, ethics of, 429-431
- IVIG (intravenous polyclonal immunoglobulin) in *Candida* infection prevention, 416
- Justice principle
 applied to newer reproductive technologies, 430
 defined, 427, 436
 patient treatment refusal and, 437, 440, 442-444
- Ketoconazole, 352, 353, 369
- Labor
 preterm, randomized clinical trials in, 255-257
 prolonged second stage of, as risk for anal sphincter injury, 15
 safety of epidural anesthesia during, in preeclampsia treated with low-dose aspirin, 244-245
 in undiagnosed breech presentation, management of, 38
- Late infections, NICHD RCT on prevention of, 271
- Late inhaled nitric oxide (iNO), early versus, in full-term or near-term infants with hypoxic respiratory failure, NICHD RCT on, 316-317
- Legal issues in WH/WD of nutrition from newborns, 483-484
- Length
 of nasal bone, as Down syndrome marker, 126, 131, 141, 154
 see also Short cervix, and PTB; Shortened femur and/or humerus, as Down syndrome marker
- Lens abscess (chorioretinitis), neonatal candidal, 403-404
- Life support withdrawal from critically ill neonates parent-health care providers' disputes on, 495-502
 see also Withholding/withdrawing nutrition from newborns, ethics of
- Lifestyles, NICHD study of maternal, 268
- Ligation, arterial, for obstetric hemorrhages
 of hypogastric artery, 97
 of uterine artery, 96-97
- Limit of viability of extremely low GA infants, 465-466
- Liveborns with Down syndrome, incidence and type of congenital heart defects in, 163
- Long-term outcome
 of fluconazole therapy of neonatal candidiasis, 421
 of renal and urinary tract candidal infection, 398
- Longitudinal follow-up, *see* Follow-up, longitudinal, of high-risk infants, NICHD RCT on
- Lorazepam, 486
- Lottery, unfairness of natural, decision making by adolescent mother on care of critically ill newborn and, 492-493

- Low-dose aspirin for preeclampsia, 239-246
conclusions and recommendations for, 245
effects of, on maternal serum thromboxane B_2 , 244-245
high-risk population for preeclampsia and, *see* High-risk population for preeclampsia
safety of epidural anesthesia and, during labor, 244
- Low gestational age, *see* Extremely low gestational age infants, ethical issues and survival of
- Low-risk population for Down syndrome, second-trimester sonography of, 157
- Low transverse incision, more than one, VBAC delivery and, 108
- Magnesium sulfate, 437
- Malassezia infection, 354
- Management, *see* Therapy
- Markers
cardiovascular, in echocardiography of Down syndrome fetus, 167-168
clinical, of asphyxia in full-term infants, patient selection for neuroprotection and, 323-325
noncardiovascular, 166-168
see also Aneuploidy markers, Genetic Sonogram Scoring Index
- Maternal age
ethics of refusal of treatment refusal by G 3 P 2 Rh negative 30-year-old Jehovah's Witness with severe Rh sensitization and hydrops fetalis at 28 weeks of gestation, 442-443
and risk adjustment for Down syndrome, 133, 135, 137
and vaginal breech delivery, 36
see also Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling
- Maternal age, cost-effectiveness of genetic sonography for Down syndrome detection and refusal of amniocentesis after counseling, 175-181
35-year-old (or older) women, 177-181
younger-than-35-year-old women, 175-177
- Maternal characteristics
PTB and, 187, 188, 192, 236
see also specific maternal characteristics; for example:
Maternal age
- Maternal counseling, *see* Counseling
- Maternal-infant bonding, effects of elective CS delivery on, 28
- Maternal inflammation and amnionitis, post-pPROM, effects of antibiotics for, on neonatal outcome, 222-224
- Maternal lifestyles, NICHD study of, 268
- Maternal mortality
risk of, with CS delivery, 22-23
see also specific conditions
- Maternal outcome
with vaginal versus CS delivery of triplet pregnancy, 69
see also Maternal mortality and specific conditions
- Maternal psychological sequelae of CS delivery, risk for, 24-25
- Maternal refusal of treatment in obstetrics, 435-445
human immunodeficiency virus-infected pregnant women refusing highly active antiretroviral therapy, 436-437
surgery refusal for serious fetal distress, 437-439
by terminally ill pregnant patient at 25 weeks of gestation, 439-441
by 30-year-old G 3 P 2 Rh negative Jehovah's Witness at 28 weeks of gestation with severe Rh sensitization and hydrops fetalis, 442-443
- Maternal risks
of fetal surgery, 451-453
see also Maternal risks of delivery
- Maternal risks of delivery
of CS delivery, *see* Maternal risks of elective CS delivery
of rotational forceps-associated delivery, 117-118
of VBAC delivery, 106-108
see also Risks of vaginal delivery, anal sphincter injury as
- Maternal risks of elective CS delivery, 22-25
anal sphincter anal injury, 23-24
mortality, 22-23
for perineum, 23-24
psychological sequelae as, 24-25
to subsequent pregnancies, 25
to subsequent reproductive function, 25
- Maternal serum thromboxane B_2 , effects of low-dose aspirin for preeclampsia on, 244-245
- Maternal surgery
for serious fetal distress, maternal refusal of, 437-439
see also Fetal surgery, ethical issue(s) in
- Maturity
pulmonary, after remote-from-term pPROM, effects of antibiotics on, 227-228
see also Growth and development
- Medical intensive care unit, *see* Neonatal intensive care unit, prediction of survival and mortality in MICU and
- Mediolateral episiotomy, 5-9
midline versus, 5-7, 9
- Membrane rupture, *see* Premature rupture of membranes
- Metronidazole, 212-215, 231, 235, 254
- Miconazole, oral, 352, 353, 407-408
- MICU (medical intensive care unit), *see* Neonatal intensive care unit, prediction of survival and mortality in MICU and
- Midline episiotomy, mediolateral versus, 5-7, 9
- Milk, human, in *Candida* infection prevention, 416
- MK 0991 (caspofungin), 368, 371-372
- MK-801, 325
- Moderate disability in asphyxiated full-term infants, 328
- Molecular tests in neonatal candidemia, 377-378
- Monitoring, intrapartum, of multifetal pregnancies, 57
- Monoamniotic twins, delivery of, 66-67

- Morbidity, *see* Neonatal morbidity, prediction of and specific conditions
- More or equal to $\geq 45^\circ$ rotation, abandoning rotational delivery requiring, 119
- More than one low transverse incision, VBAC delivery and, 108
- Morphine, 486-487
- Morphology, *Candida*, 361-362
- Mortality
- CS delivery and risk of maternal, 22-23
 - neonatal, *see* Neonatal mortality
 - see also* specific conditions
- Mothers
- decision making by young adolescent, on care of critically ill newborn, 492-494
 - see also* Parent(s) and entries beginning with term: Maternal
- Mucocutaneous candidiasis, neonatal, 406-413
- congenital candidiasis, 408-409
 - diaper dermatitis, 408
 - invasive fungal dermatitis, 409-410
 - oropharyngeal, 406-408
 - spontaneous intestinal perforation, 410-411
 - systemic disease associated with, 411
- Multifetal pregnancy
- preeclampsia in, 242
 - see also* Multifetal pregnancy, vaginal delivery of
- Multifetal pregnancy, vaginal delivery of
- criteria for, 59
 - CS versus, of triplet pregnancy, maternal and neonatal outcome of, 69
 - planning of, 58-59
 - of twin pregnancy, 67
 - see also* Intrapartum management of multifetal pregnancies
- Multiparous women
- risk factor for anal sphincter injury in vaginal delivery for, 16-17
 - vaginal breech delivery for, 36-37
- Multiple negative randomized clinical trials (RCTs), NICHD, 343-350
- confounded or unattainable primary outcome in, 346-347
 - data result variability between centers in, 347-348
 - and incorrect basis for intervention, 344-345
 - insufficient treatment effects and, 348
 - RCT design and, 344
 - wrong preliminary data and, 345-346
- Nasal bone length, as Down syndrome marker, 126, 131, 141, 154
- Natural lottery, unfairness of, decision making by adolescent mother on care of critically ill newborn and, 492-493
- Near-full-term infants, *see* Inhaled nitric oxide for hypoxic respiratory failure in full-term or near full-term infants, NICHD RCT on; Neuroprotection of asphyxiated term infants, NICHD RCT on and specific conditions
- Necrotizing enterocolitis (NEC) study, NICHD, 271
- Negative randomized clinical trials, *see* Multiple negative randomized clinical trials, NICHD
- Neonatal asphyxia, *see* Asphyxia
- Neonatal candidiasis, *see* Invasive neonatal candidiasis
- Neonatal development, NICHD RCT on, 275-276; *see also* Growth and development of VLBW and ELBW infants, NICHD study on
- Neonatal Institute of Child Health and Development (NICHD) research
- introduction to, 261-263
 - outcome and practice changes of NICHD and, 281-287
 - selected observational studies, 265-271
 - see also* Randomized controlled trials, NICHD
- Neonatal intensive care unit (NICU), prediction of survival and mortality in MICU and, 471-479
- as function of bed-days, 476-477
 - as function of individual patients, 475-476
 - morbidity prediction versus, 477-478
 - prospective analyses of, 475
 - retrospective analyses of, 472-475
 - statistical sensitivity in, 472
 - summary on, 478-479
- Neonatal morbidity, prediction of
- and of mortality in NICU and MICU, 477-478
 - prenatal morbidity and, 247-252
 - see also* Antibiotics, effects of, on neonatal morbidity after pPROM and specific conditions
- Neonatal mortality
- fluconazole-related, 420
 - in multifetal pregnancies, 55
 - pPROM and, 220
 - see also* Extremely low gestational age infants, ethical issues and survival of; Neonatal intensive care unit, prediction of survival and mortality in MICU and and specific conditions
- Neonatal outcome
- in multifetal pregnancies, 55
 - preeclampsia and, 242, 243
 - in triplet pregnancy with vaginal versus CS delivery, 69
 - see also* Extremely low gestational age infants, ethical issues and survival of; Long-term outcome; Neonatal intensive care unit, prediction of survival and mortality in MICU and; Neonatal morbidity; Neonatal mortality; Neonatal outcome, effects of antibiotics on, in remote-from-term pPROM
- Neonatal outcome, effects of antibiotics on, in remote-from-term pPROM, 225-228
- on birth weight, 227
 - digital examination impact on, 227
 - factors altering, 225-226
 - oligohydramnios impact on, 226-227
 - on pulmonary maturity, 227-228
- Neonatal risks of CS section delivery, *see* Fetal and neonatal risks of elective CS delivery
- Neonatal surgery for renal and urinary tract candidal infection, 398
- Neonates, *see* Ethics in perinatology; Invasive neonatal candidiasis and entries beginning with term: Neonatal

- Neurodevelopment
 of extremely low GA infants, 464-465
see also Neurodevelopment, NICHD RCT on
- Neurodevelopment, NICHD RCT on
 on iNO effects on near- or full-term infant, with
 hypoxic respiratory failure, 315
 of VLBW and ELBW infants, 275-276
- Neuroimaging in neuroprotection of asphyxiated
 full-term infants, NICHD RCT on, 326
- Neurological signs of asphyxia in full-term infants,
 as factor in patient selection for
 neuroprotection and, 323
- Neurophysiological signs of brain injury in
 asphyxiated full-term infants, patient
 selection for neuroprotection and, 323-324
- Neuroprotection of asphyxiated term infants,
 NICHD RCT on, 320-332
 effective therapy for, 325-329
 patient selection for, 322-325
 provision of, 275-276
 therapeutic window in, 321-322
 therapy for resuscitation and, 320-321
- Newer reproductive technologies, ethical framework
 for, 427-434
 applied to gene transfer technology, 431-433
 for number of embryos to be transferred during
 in vitro fertilization, 429-431
- NICHD, *see* Neonatal Institute of Child Health and
 Development research
- Nitrogen dioxide formation during iNO therapy for
 hypoxic respiratory failure, 312-313
- Noncardiovascular markers in fetal
 echocardiography, 166-168
- Nonmaleficence principle
 defined, 436
 patient refusal of treatment and, 437, 438, 440,
 442, 444
see also Beneficence principle
- Non surgical management of obstetric hemorrhages,
 99-101
- Nonvertex first twin presentation, delivery mode
 and, 62-65
- Normal fetal echocardiography, risk of Down
 syndrome after, 168-169
- Nuchal and extended arms in vaginal breech
 delivery, 39
- Nuchal fold, as Down syndrome marker, 124, 162,
 166-168
 in combined serum and ultrasound detection, 146
 in patient-specific risk estimation for Down
 syndrome, 148
 risk adjustment for Down syndrome with, 131,
 133-137
 in second-trimester genetic sonography, 154, 155,
 157
- Nulliparous women
 preeclamptic, low-dose aspirin for, 240
 vaginal breech delivery for, 36-37
- Nutrition
 requirements for growth of VLBW and ELBW
 infants, NICHD RCT on, 306-308
see also Withholding/withdrawing of nutrition
 from newborns, ethics of
 Nystatin, oral, 407, 416-417
- Observational studies of NICHD, 265-271
 on growth and development of VLBW and ELBW
 infants, 268-270
 on interventions for early-onset infections, 295-
 296
- Obstetric expectations of neonatal survival in PTB,
 effects of, on management, 249
- Obstetric hemorrhages, *see* Antepartum
 hemorrhages; Postpartum hemorrhages;
 Therapy of obstetric hemorrhages
- Obstetrics
 introduction to, 1-2
see also Anal sphincter injury in vaginal delivery;
 Antepartum hemorrhages; Cervical cerclage;
 Episiotomy; Fetal risks of delivery; Forceps
 delivery; Intrapartum management of
 multifetal pregnancies; Maternal refusal of
 treatment in obstetrics; Maternal risks of
 delivery; Postpartum hemorrhages; Risks of
 vaginal delivery; Therapy of obstetric
 hemorrhages; Vacuum extractor; Vaginal
 birth after cesarean section delivery; Vaginal
 breech delivery
- Obstructive uropathy
 surgical management of, 398
see also Renal and urinary tract infection, neonatal
 candidal
- Older-than-35-year-old women, cost-effectiveness of
 genetic sonography for Down syndrome
 detection in, who refused amniocentesis after
 counseling, 177-181
- Oligohydramnios in remote-from-term pPROM,
 neonatal outcome and, 226-227
- Operative intervention, *see* Surgery
- Ophthalmologic candidal infection
 (endophthalmitis), neonatal, 401-405
- Opinions of health care providers and academics on
 management of extremely low GA infants,
 463
- ORACLE trial of antibiotics for pPROM, 228-229
- Oral miconazole, 352, 353, 407-408
- Oral nystatin, 407, 416-417
- Oropharyngeal candidiasis (thrush), neonatal, 406-
 408
- Outcome
 changes in practice and, of NICHD, 281-287
 long-term, of fluconazole therapy of neonatal
 candidiasis, 421
 of neonatal CNS candidiasis, 390
see also Long-term outcome; Maternal outcome;
 Neonatal outcome; Outcome, NICHD RCT
 on
- Outcome, NICHD RCT on
 confounded primary or unattainable, and
 multiple negative RCTs, 346-347
 neurodevelopmental, of brain-injured VLBW and
 ELBW infants, 275-276

- of neuroprotection in asphyxiated term infants, 328
of RDS in VLBW and ELBW infants, 288-292
Oxytocin, 38, 253, 256
- Pain, postpartum, with mediolateral versus midlateral episiotomy, 7
Pain management in vaginal breech delivery, 38
Parent(s)
input of, in decision making for resuscitation of extremely low GA infants, 466
see also Family; Fathers; Mothers; Parent(s), disputes between health care providers and; Parent-infant bonding
Parent(s), disputes between health care providers and
on life support withdrawal, 495-502
on resuscitation of extremely low GA infants, 466-467
Parent-infant bonding, effects of elective CS delivery on, 28
Parity, *see* Multiparous women; Nulliparous women; Primiparous women
Pathogenesis of invasive neonatal candidiasis, 353
CNS candidiasis, 385-386
colonization and epithelial cell adhesion in, 357-364
renal and urinary tract infections, 393-394
see also Colonization, epithelial adhesion and, in pathology of neonatal candidiasis
Pathophysiology of neonatal candidemia, 375-376
Patient selection for neuroprotection of asphyxiated term infants, 322-325
Patient-specific risk for Down syndrome, estimation of, with combined serum and ultrasound screening, 147-149
Pelvic delivery, *see* Vacuum extractor
Pelvic vessel embolization for obstetric hemorrhages, 97-99
Pelvis, pre-vaginal breech delivery assessment of, 37
Penicillins, 218, 297
Perforation, spontaneous intestinal, neonatal candidiasis and, 410-411
Perineal injury, *see* Anal sphincter injury in vaginal delivery
Persistent pulmonary hypertension of the newborn (PPHN), NICHD RCT on, 270-271, 311-312
Personnel
and theater times for CS delivery, 29
see also Health care providers
Petrolatum ointment, 416
Phenobarbital, 275, 345
Physical trauma, risk of fetal and neonatal, with elective CS delivery, 26
Physicians
disputes between family and, *see* Parent(s), disputes between health care providers and
role of, in decision making by adolescent mother on care of critically ill newborn, 493-494
see also Guidelines, physicians'; Health care providers
Physiology of hypovolemia, and nonsurgical management of obstetric hemorrhages, 99-100
Pichia infection, 354
Placenta, PPH due to retained, 96
Placenta abruptio, *see* Abruptio placentae
Placenta previa/accreta, antepartum hemorrhages due to, 87-90
Placental histology after antibiotics in pPROM, 224-225
Planning of delivery
CS and vaginal delivery, risks and benefits of, 26-27
of multifetal pregnancies, 58-59
Plexus, cysts of choroid, as Down syndrome markers, 140, 146, 154, 162, 166
Polled opinions of health care providers and academics on management of extremely low GA infants, 463
Polyclonal immunoglobulin, intravenous, in *Candida* infection prevention, 416
Population studies of combined serum and ultrasound screening for Down syndrome, 149
Postnatal therapy and management of anal sphincter injury in vaginal delivery, 17-18
Postoperative complications of obstetric hemorrhage management, 101
Postpartum hemorrhages (PPH), 94-96
delayed, 96
due to genital tract hematomas, 95-96
due to retained placenta and/or uterine inversion, 96
due to uterine atony, 94-95
Postpartum pain, effects of mediolateral versus midlateral episiotomy on, 7
Postpartum sexual function, effects of mediolateral versus midlateral episiotomy on, 7
Post-term pregnancy, randomized clinical trials of, 253-255
PPH, *see* Postpartum hemorrhages
PPHN (persistent pulmonary hypertension of the newborn), NICHD RCT on, 270-271, 311-312
pPROM, *see* Preterm premature rupture of membranes
Practice
clinical, ethical framework for, 428
NICHD, outcome changes in, 281-287
Prediction, *see* Neonatal intensive care unit, prediction of survival and mortality in MICU and; Neonatal morbidity, prediction of
Preeclampsia, *see* Low-dose aspirin for preeclampsia
Pregestational diabetes mellitus, preeclampsia and, 243-244
Pregnancy, *see specific aspects of pregnancy; for example*, Multifetal pregnancy; Multiparous women; Nulliparous women; Primiparous women
Preliminary data, incorrect, and negative RCTs, 345-346
Premature rupture of membranes (PROM)
cervical cerclage after, 78-80
see also Preterm premature rupture of membranes

- Prematurity, *see* Extremely low birth weight infants;
Extremely low gestational age infants, ethical
issues and survival of
- Prenatal conditions and interventions, *see entries
beginning with terms*: Antenatal, Fetal
- Presentation, fetal, *see* Fetal presentation
- Preterm birth (PTB)
antenatal prediction of neonatal morbidity and
mortality with, 247-252
preterm infants with severe hypoxic respiratory
failure, NICHD RCT on iNO for, 317
summary of study on, 185-193
see also Antibiotics for PTB; Cervical ultrasound
evaluation for PTB; Low-dose aspirin for
preeclampsia; National Institute of Child
Growth and Development; Premature
rupture of membranes; Randomized clinical
trials in PTB; Uterine contractions, role of, in
PTB
- Preterm deliveries with vacuum extractor, 51
- Preterm infants
with severe hypoxic respiratory failure, NICHD
RCT on iNO for, 317
see also Very low birth weight infants
- Preterm labor, randomized clinical trials in, 255-257
- Preterm premature rupture of membranes
(pPROM)
antibiotic therapy for, *see* Antibiotics, effects of,
on neonatal morbidity after pPROM
randomized clinical trials in, 257-258
- Prevention
primary, of anal sphincter injury in vaginal
delivery, 16-17
PTB, *see* Antibiotics for PTB
see also Prevention, NICHD RCT on; Prevention of
neonatal invasive candidiasis
- Prevention, NICHD RCT on
for late-onset infections for, 271
see also Early-onset infections in VLBW and ELBW
infants, NICHD RCT on interventions to
prevent; Neuroprotection of asphyxiated
term infants, NICHD RCT on
- Prevention of neonatal invasive candidiasis, 414-424
with antifungal pharmacotherapy, *see* Antifungal
therapy of neonatal candidiasis
of *Candida* transmission, 412-413
of candidemia, 376
of ELBW and VLBW infants, 418-420
immune effectors in, 416
- Previous anal sphincter injury, as risk for
subsequent anal sphincter injury, 15
- Previous cesarean section (CS) deliveries, placenta
previa/accreta and number of, 88
- Previous history of PTB, and PTB in subsequent
pregnancy, 186, 187, 190, 191
- Previous preeclampsia, and low-dose aspirin effects
on subsequent preeclampsia, 242-243
- Prima facie principle in ethics, 428
- Primary outcome, confounded, and negative RCTs,
346-347
- Primary prevention of anal sphincter injury in
vaginal delivery, 16-17
- Primiparous women
risk factor for anal sphincter injury in vaginal
delivery for, 15
vaginal breech delivery for, 36-37
- Principlism
defined, 435-436
and patient refusal of treatment, 437, 438, 440-
444
- Professional virtues, defined, 427-428
- Proficiency of sonographers performing cervical
ultrasound, 197-198
- Progesterone, 254, 256-259
- Prognosis
of renal and urinary tract candidal infection, 398
see also Outcome
- Prolonged second stage of labor, as risk factor for
anal sphincter injury, 15
- PROM, *see* Premature rupture of membranes
- Prophylactic cerclage, indications for, 74
- Prophylaxis, *see* Prevention
- Prospective analysis of mortality and survival
prediction in NICU and MICU, 475
- Proteinuria, and PTB, 190
- Psychological sequelae, maternal, of elective CS
delivery, 24-25
- PTB, *see* Preterm birth
- Pulmonary hypertension, persistent newborn, in
VLBW and ELBW infants, NICHD RCT on,
270-271, 311-312
- Pulmonary maturity after remote-from-term
pPROM, effects of antibiotics on, 227-228
- Pyelectasis, *see* Renal pyelectasis, as Down syndrome
marker
- Quadruplet pregnancies, intrapartum management
of, 69-70
- Quintuplet pregnancies, intrapartum management
of, 69-70
- Randomized clinical trials (RCTs) in PTB, 253-260
with antibiotics, *see* Antibiotics for PTB
conclusions on, 259-260
with low-dose aspirin, *see* Low-dose aspirin for
preeclampsia
post-term pregnancy, 253-255
pPROM trial, 257-258
preterm labor trial, 255-257
"stuck twins" trial, 258-259
- Randomized controlled trials (RCTs), NICHD
on BPD/CLD, 272-274
on early- and late-onset infections, 271, 293-302
on inhaled NO, *see entries beginning with terms*:
Inhaled nitric oxide
on interventions, *see* Interventions, NICHD RCTs
on
NICHD network and, 264-280
see also Follow-up, longitudinal, of high-risk
infants, NICHD RCT on; Growth and
development of VLBW and ELBW infants,
NICHD study on; Inhaled nitric oxide for
hypoxic respiratory failure, NICHD RCT on;
Multiple negative randomized clinical trials,

- NICHD; Neuroprotection of asphyxiated term infants, NICHD RCT on; Outcome, NICHD RCT on; Respiratory distress syndrome in VLBW and ELBW infants, NICHD RCT on
- RCTs, *see* entries beginning with terms: Randomized controlled trials
- RDS (respiratory distress syndrome) in VLBW and ELBW infants, NICHD RCT on, 288-292
- Real-time ultrasound, grayscale four-chamber, of fetal heart defects, 167
- Recommendations, *see* Guidelines, physicians'
- Registry, VLBW and ELBW infants, NICHD, 265-267
- Remote-from-term preterm premature rupture of membranes, *see* Neonatal outcome, effects of antibiotics on, in remote-from-term pPROM
- Renal pyelectasis (hydronephrosis), as Down syndrome marker, 125, 131, 166-168
- in combined serum and ultrasound detection, 146
- risk adjustment for Down syndrome with, 133-135, 140
- in second-trimester sonography, 154
- Renal and urinary tract infection (UTI), neonatal candidal, 393-400
- diagnosis of, 394-396
- epidemiology of, 393
- pathogenesis of, 393-394
- prognosis and sequelae of, 398
- risk factors for, and clinical manifestations of, 393-394
- therapy of, 396-398
- Repeat (second) cervical cerclage, 82
- Reproductive function, risk of elective CS delivery to subsequent, 25
- Reproductive technologies, *see* Newer reproductive technologies, ethical framework of
- Rescue (emergent) cervical cerclage, 80-82
- Rescue cesarean section (CS) for arrested descent of buttocks in vaginal breech delivery, 39
- Research, ethical framework for, 428
- Resistance to fluconazole, 388, 420-421
- Respiratory distress syndrome (RDS) in VLBW and ELBW infants, NICHD RCT on, 288-292
- Respiratory failure, *see* Inhaled nitric oxide for hypoxic respiratory failure, NICHD RCT on
- Respiratory function, fetal and neonatal, risk of elective CS delivery to, 27-28
- Resuscitation
- of asphyxiated full-term infants, therapy of, 320-321
- of extremely low GA infants, decision making on, 466-467
- Retained placenta, PPH due to, 96
- Retinopathy of prematurity (ROP), candidiasis and, 404-405
- Retrospective analyses of mortality and survival prediction in NICU and MICU, 472-475
- Rh negative Jehovah's Witness at 28 weeks of gestation, 30-year-old G 3 P 2, with severe Rh sensitization and hydrops fetalis, ethics of treatment refusal by, 442-443
- Risks
- fetal, *see* Fetal risks
- germ-line, of gene transfer technology, 433
- maternal, *see* Maternal risks
- for preeclampsia, *see* High-risk population for preeclampsia
- see also* Risks of delivery; Risks for Down syndrome; Risks of fetal surgery
- Risks of delivery
- with rotational forceps, 117-118
- of VBAC delivery, 106-108
- see also* Fetal risks of delivery; Maternal risks of delivery; Risks of vaginal delivery; Risks for neonatal *Candida* infection
- Risks for Down syndrome
- estimation of patient-specific, with combined serum and ultrasound screening, 147-149
- low, second-trimester genetic sonography in patients at, 157
- after normal fetal echocardiography, 168-170
- see also* Risks for Down syndrome, genetic sonography adjustment of; Second-trimester genetic sonography in high-risk patients for Down syndrome, need for amniocentesis and
- Risks for Down syndrome, genetic sonography
- adjustment of, 130-144
- factors increasing, 131-136
- factors reducing, 136-141
- Risks of fetal surgery
- and benefits to fetus, 448-451
- maternal, 451-453
- Risks for neonatal *Candida* infection
- antibiotics and, 354, 357, 359-360, 394, 414-416
- for *Candida* colonization, 359-360, 415-416
- for candidemia, 376
- corticosteroids and, 357, 414-416, 421, 422
- for neonatal candidemia, 376
- for renal and urinary tract infection, 393-394
- topical ointments as, 415, 416
- Risks of vaginal delivery
- fetal, neonatal, and maternal benefits of CS and/or, 26-27
- see also* Risks of vaginal delivery, anal sphincter injury as
- Risks of vaginal delivery, anal sphincter injury as
- risk factors for injury, 15-16
- of severe injury with mediolateral versus midlateral episiotomy, 7-9
- ROP (retinopathy of prematurity), candidiasis and, 404-405
- Rotational forceps delivery, 112-120
- contraindications to, 115
- forceps described, 113
- requiring $\geq 45^\circ$ rotation, abandoning, 119
- risks associated with, 117-118
- technical considerations on, 116-117
- use and abuse of, 116
- Rupture, *see* Premature rupture of membranes; Uterine rupture

- Safety
 of labor epidural anesthesia in preeclampsia treated with low-dose aspirin, 244-245
 of neuroprotection of asphyxiated full-term infants, 327-328
- Salvage (emergent) cervical cerclage, indications for, 74
- Sanzoni-Smellie maneuver, described, 117
- Scars, vertical, in VBAC delivery, 108
- School age neurodevelopmental outcome of extremely low GA infants, 464-465
- Second (repeat) cervical cerclage, 82
- Second stage of labor, prolonged, as risk factor for anal sphincter injury, 15
- Second-trimester Down syndrome fetuses, echocardiography and genetic sonography of, 163-166
 incidence and types of congenital heart defects in, 163-165
- Second-trimester genetic sonography for Down syndrome detection
 risk adjustment with, 131, 132, 135
see also Second-trimester genetic sonography in high-risk patients for Down syndrome, need for amniocentesis and
- Second-trimester genetic sonography in high-risk patients for Down syndrome, need for amniocentesis and, 152-159
 accuracy of, 153-154, 156-157
 amniocentesis after, 155-156
 current practice of, 157-159
 as guide to clinical management, 154
 updated information on, 154-155
- Selection criteria for vaginal breech delivery, 36-38
- Self-sacrifice
 as applied to newer reproductive technologies, 431
 defined, 427-428
- Sensitivity, statistical, in mortality and survival prediction in NICU and MICU, 472
- Sensitization, severe Rh, ethics of treatment refusal by 30-year-old G 3 P 2 Rh negative Jehovah's Witness with hydrops fetalis and, at 28 weeks of gestation, 442-443
- Septuplet pregnancies, intrapartum management of, 69-70
- Sequelae, *see* Long-term outcome
- Sequential use of VE and forceps, 50-51
- Serum thromboxane B₂, maternal, effects of low-dose aspirin for preeclampsia on, 244-245
- Serum and ultrasound screening, *see* Combined serum and ultrasound screening for Down syndrome detection
- Severe anal sphincter injury, risk of, in vaginal delivery, 7-9
- Severe disability in asphyxiated full-term infants, 328
- Severe hypoxic respiratory failure, iNO in preterm infants with, NICHD RCT of, 317
- Severe Rh sensitization, ethics of treatment refusal by 30-year-old G 3 P 2 Rh negative Jehovah's Witness with hydrops fetalis and, at 28 weeks of gestation, 442-443
- Sextuplet pregnancies, intrapartum management of, 69-70
- Sexual function, postpartum, mediolateral versus midlateral episiotomy effects on, 7
- Shared decision making on care of critically ill newborns, 489-491
- Short cervix, and PTB, 186-192
 BV associated with, 214
 cervical cerclage for, 78, 191, 192
 cervical ultrasound diagnosis of, 200-202
- Shortened femur and/or humerus, as Down syndrome marker, 124-125
 in combined serum and ultrasound detection, 146
 and estimation of patient-specific risk for Down syndrome, 148
 risk adjustment for Down syndrome with, 131, 133-135, 138-139
- Site of care, influence of, on survival of extremely low GA infants, 463
- Skin abscess, neonatal candidal, 411
- Skin colonization, *Candida*, 358
see also Mucocutaneous candidiasis, neonatal
- Society, role of, in decision making on fetal surgery, 453-455
- Sonographers performing cervical ultrasound, certification and proficiency of, 197-198
- Sonography, *see* Cervical ultrasound evaluation for PTB; Fetal ultrasound
- Species, *Candida*
 colonization by, 353-354, 357-358
 species-specific epithelial adhesion, 360-361
see also specific *Candida* species
- Sphincter, anal, *see* Anal sphincter injury in vaginal delivery
- Spontaneous intestinal perforation, neonatal candidiasis and, 410-411
- Spontaneous preterm birth, *see* Preterm birth
- SPTB (spontaneous preterm birth), *see* Preterm birth
- Statistical sensitivity in mortality and survival prediction in NICU and MICU, 472
- Steroids, *see* Corticosteroids
- Structural defects in Down syndrome
 major, risk adjustment and, 131-134
 as markers, 126
- "Stuck twins", randomized clinical trials in, 258-259
- Subsequent pregnancies
 CS delivery as risk to, 25
 maternal counseling on anal sphincter injury in, 18
- Subsequent reproductive function, risk presented by CS delivery to, 25
- Surfactants, 288, 292, 458, 463
- Surgery
 of *Candida* lens, 404
 neonatal, of obstructive uropathy, 398
 of obstetric hemorrhages, 96-99
see also Fetal surgery, ethical issue(s) in; Maternal surgery
- Survival, *see* Extremely low gestational age infants, ethical issues and survival of; Neonatal

- intensive care unit, prediction of survival and mortality in MICU
- Susceptibility to antifungal therapy in neonatal candidemia, testing, 380
- Suture, B-Lynch, for obstetric hemorrhages, 97
- Systemic disease
- associated with neonatal mucocutaneous candidiasis, 411
 - see also specific conditions
- T vaginalis* (*Trichomonas vaginalis*) infections, PTB and, 212-215
- TAC (transabdominal cervicoisthmic cerclage), 76-78
- Technical repair of anal sphincter injury, 17
- Temporal trends in survival of extremely low GA infants, 462-463
- Terbutaline, 254, 259
- Term infants, see Inhaled nitric oxide for hypoxic respiratory failure in full-term or near full-term infants, NICHD RCT on; Neuroprotection in asphyxiated term infants, NICHD RCT on and specific conditions
- Terminally ill pregnant patient at 25 weeks of gestation, ethics of treatment refusal by, 439-441
- Theater times, personnel and, for CS delivery, 29
- Theophylline, 254
- Therapeutic window in neuroprotection of asphyxiated term infants, 321-322
- Therapy
- antibiotic, see Antibiotics for PTB
 - of Down syndrome, second-trimester genetic sonography as guide to, 154
 - of episiotomy, 6-7
 - ethics and, see Ethics in perinatology
 - of labor in vaginal breech delivery, 38
 - of obstetric hemorrhages, see Therapy of obstetric hemorrhages
 - of preeclampsia, see Low-dose aspirin for preeclampsia
 - preventive, see Prevention
 - refusal of, see Maternal refusal of treatment in obstetrics
 - surgical, see Surgery
 - see also Antifungal therapy of neonatal candidiasis; Interventions, NICHD RCTs on; Intrapartum management of multifetal pregnancies; Therapy of anal sphincter injury; Therapy of neonatal candidiasis; Therapy of obstetric hemorrhages specific conditions and therapeutic modalities
- Therapy of anal sphincter injury, 16-18
- maternal counseling on injury for subsequent pregnancies, 18
 - postnatal, 17-18
 - with primary prevention, 16-17
 - with technical repair, 17
- Therapy of neonatal candidiasis
- antifungal, see Antifungal therapy of neonatal candidiasis
 - of CNS candidiasis, 388-389
 - empiric, of candidemia, 379
 - renal and urinary tract infection, 396-398
- Therapy of obstetric hemorrhages, 99-102
- advances in, 101-102
 - nonsurgical, 99-101
 - surgical, 96-99
- 30-year-old G 3 P 2 Rh negative Jehovah's Witness at 28 weeks of gestation with severe Rh sensitization and hydrops fetalis, ethics of treatment refusal by, 442-443
- 35-year-old women, cost-effectiveness of genetic sonography for Down syndrome detection in, who refused amniocentesis by, after counseling, 177-181
- Threshold of viability of extremely low GA infant, effects of surfactants and steroids on, 463
- Thromboxane B₂, maternal serum, effects of low-dose aspirin for preeclampsia on, 244-245
- Thrush (oropharyngeal candidiasis), neonatal, 406-408
- Timing
- delivery, of multifetal pregnancies, 57
 - of neuroprotection for asphyxiated full-term infants, 328-329
- Tocolytics, 191, 205, 219, 250, 251, 259, 290
- Topical ointments, as risk factors for *Candida* infection, 415, 416
- Transabdominal cervicoisthmic cerclage (TAC), 76-78
- Transfusions of blood components in obstetric hemorrhage management, 100-101
- Transmission of *Candida*, prevention of, 412-413
- Transverse incision, more than one low, VBAC delivery and, 108
- Trauma and injury, see Anal sphincter injury in vaginal delivery; Physical trauma
- Trends, temporal, in extremely low GA infant survival, 462-463
- Trials, see Randomized clinical trials in PTB
- Trichomonas vaginalis* (*T vaginalis*; TV) infections, PTB and, 212-215
- Trichosporon* infection, 354
- Triplet pregnancies, intrapartum management of, 55, 67-69
- Trisomy 21, see Genetic sonography for Down syndrome detection
- TV (*Trichomonas vaginalis*) infections, PTB and, 212-215
- 25 weeks of gestation, ethics of treatment refusal by terminally ill pregnant patient at, 439-441
- 28 weeks of gestation, treatment refusal by 30-year-old G 3 P 2 Rh negative Jehovah's Witness with severe Rh sensitization and hydrops fetalis, 442-443
- Twin pregnancies
- intrapartum management of, see Twin pregnancies, intrapartum management of
 - perinatal and infant mortality in, 55
 - PTB in, 190
 - stuck twins, randomized clinical trials in, 258-259

- Twin pregnancies, intrapartum management of, 59-67
 delivery mode in, *see* Delivery mode in twin pregnancies, fetal presentation and in general, 59-61
- Ultrasound, *see* Cervical ultrasound evaluation for PTB; Fetal ultrasound
- Unattainable primary outcome, negative RCTs and, 346-347
- Undiagnosed breech presentation prior to labor, vaginal delivery and, 38
- Unfairness of natural lottery, decision making by adolescent mother on care of critically ill newborn and, 492-493
- Urinary tract infection, *see* Renal and urinary tract infection, neonatal candidal
- Uterine artery, ligation of, in obstetric hemorrhages, 96-97
- Uterine atony, PPH due to, 94-95
- Uterine contractions, role of, in PTB, 186, 188
 study of, 204-211
- Uterine inversion, PPH due to, 96
- Uterine rupture
 anteartum hemorrhages due to, 93-94
 prevention of, in VBAC delivery, 109
- UTI (urinary tract infection), *see* Renal and urinary tract infection, neonatal candidal
- Utilitarianism, *see* Consequentialism
- Vacuum extractor (VE), 46-53
 forceps and, *see* Forceps delivery, VE and preterm deliveries with, 51
- Vaginal birth after cesarean section (VBAC)
 delivery, 105-111
 cost of, 108-109
 efficacy of, 105-106
 in more than one low transverse incision or vertical scar, 108
 prediction of successful, 109
 prevention of uterine rupture in, 109
 risk of, 106-108
 of twin pregnancy, 67
- Vaginal breech delivery, 34-45
 of breech with external cephalic version, 35-36
 CS delivery versus, 34-35, 39
 conclusions on, 40-41
 the delivery, 38-40
 forceps to assist, 113
 incidence of, 34
 labor management in, 38
 selection criteria for, 36-38
 of undiagnosed breech prior to delivery, 38
- Vaginal colonization, *Candida*, 358-359
- Vaginal delivery, *see* Anal sphincter injury in vaginal delivery; Episiotomy; Multifetal pregnancy, vaginal delivery of; Vaginal birth after cesarean section delivery; Vaginal breech delivery
- Vaginal and genital tract infections, PTB and, 186-188, 212-216
 see also Antibiotics for PTB
- Vaginal sonography, *see* Cervical ultrasound evaluation for PTB
- Vaginosis, bacterial, PTB and, 186-188, 212-215
- Variability of data results between centers and, NICHD multiple negative RCTs due to, 347-348
- Vasa previa, antepartum hemorrhages due to, 92-93
- VBAC, *see* Vaginal birth after cesarean section delivery
- VE, *see* Vacuum extractor
- Version, cephalic external, in breech delivery, 35-36
- Vertex/nonvertex presentation in twin pregnancy, delivery mode and, 62-65
- Vertex/vertex presentation in twin pregnancy, delivery mode and, 61-62
- Vertical scars in VBAC delivery, 108
- Very low birth weight (VLBW) infants
 prevention of candidiasis in, with fluconazole, 418-420; *see also* Neonatal candidiasis
 see also Neonatal Institute of Child Health and Development research; Preterm birth
- Viability of extremely low GA infants
 limits of, 465-466
 threshold of, effects of surfactants and steroids on, 463
- VLBW infants, *see* Very low birth weight infants
- Voriconazole, 368, 370-372, 389
- Wandering technique of rotational forceps use, described, 116
- Weight, fetal, and vaginal breech delivery, 37
- WH/WD of nutrition, *see* Withholding/withdrawing of nutrition from newborns, ethics of
- Withdrawal of life support, *see* Life support withdrawal from critically ill neonates; Withholding/withdrawing of nutrition from newborns, ethics of
- Withholding/withdrawing (WH/WD) of nutrition from newborns, ethics of, 480-487
 decision making on, 482-484
 emotional considerations in, 484-486
 guiding strategies for, 486-487
 and hydration from adults, 480-481
- Young adolescent mothers, decision making on care of critically ill newborn by, 491-494
- Younger-than-35-year-old women, cost-effectiveness of genetic sonography for Down syndrome detection in, who refused amniocentesis after counseling, 175-177